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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,268	03/24/2004	Harry Sewell	1857.0790001	4101
26111	7590	05/13/2005	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			MATHEWS, ALAN A	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/807,268	Applicant(s) SEWELL, HARRY	
	Examiner Alan A. Mathews	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,11-14,17 and 20 is/are rejected.
- 7) ☒ Claim(s) 2,3,7-10,15,16,18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/04 & 3/24/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowance of Claims

1. The Examiner withdraws the indicated allowability of claims 1, 4-6, 11-14, 17, and 20 in the previous office action mailed December 10, 2004, in view of the reference to Takahashi (5,636,066). The Examiner apologizes for any inconvenience to the Applicant.

Information Disclosure Statement

2. The Information Disclosure Statement filed September 10, 2004, was inadvertently overlooked, and is now being considered. At least one reference from this IDS is being applied in the following office action. The Examiner is also including a copy of the initialed PTO-1449 which was considered in the previous office action, but did not have an application serial number on it (simply to avoid a printer rush return if the application ever issues).

Terminal Disclaimer

3. The Terminal Disclaimer filed February 28, 2005, has been approved and has been entered.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-6, 12-14, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (U. S. Patent No. 5,636,066) in view of Oomura (U. S. Patent No. 5,796,524). Takahashi discloses in figures 14 and 15 directing light to element M1(M3) using a reticule 1 and using first optical device G1. Element M1(M3) redirects light toward a second optical device G2. Element G2 reflects light to a third optical device G3 positioned opposite the second optical device. Element G3 reflects light to M1(M3), which redirects light from the third optical device (G3) onto a fourth optical device G5 positioned opposite the first optical device G1. Takahashi reflects the light four times, which is an even number. Thus, Takahashi discloses the invention claimed except that Takahashi uses a mirror M1(M3) instead of a beam splitter. Oomura discloses in figure 3 and 5 and column 9, lines 1-63, using a beam splitter BS to reflect light to or from optical devices on all sides of the beam splitter BS. Oomura also discloses in column 6, line 38, and the use of aspheric mirrors. Oomura further discloses in column 6, lines 27-33, the use of a polarizing optical device. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide Takahashi with a beam splitter instead of element M₁ (M₃) in view of Oomura for the purpose of

Art Unit: 2851

simplifying the construction of the optics, and thus making the device cheaper and more easily manufactured.

6. Claims 1, 5, 6, 11-13, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (U. S. Patent No. 5,636,066) in view of Schuster (U. S. Patent Publication No. 2002/0167734 A1). Takahashi discloses in figures 14 and 15 directing light to element M1(M3) using reticule 1 and using a first optical device G1. Element M1(M3) redirects light toward a second optical device G2. Element G2 reflects light to a third optical device G3 positioned opposite the second optical device. Element G3 reflects light to M1(M3), which redirects light from the third optical device (G3) onto a fourth optical device G5 positioned opposite the first optical device G1. Takahashi reflects the light four times, which is an even number. Thus, Takahashi discloses the invention claimed except that Takahashi uses a mirror M1(M3) instead of a beam splitter. Schuster discloses in figure 2 and paragraphs # 56-#62, a beam splitter 1000. Elements 1022 and 1038 are quarter wave plates. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide Takahashi with a beam splitter instead of element M₁ (M₃) in view of Schuster for the purpose of simplifying the construction of the optics, and thus making the device cheaper and more easily manufactured.

Allowable Subject Matter

7. Claims 2, 3, 7-10, 15, 16, 18, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reasons for the indicated allowability are as follows:

The prior art does not disclose or suggest a baffle plate located adjacent the fourth side of the beam splitter before the fourth optical device, the baffle plate substantially preventing scattered light generated within the beam splitter from entering the fourth optical device in combination with all the other elements recited in the parent claim to dependent claim 1.

The prior art does not disclose or suggest wherein the third optical device comprises a flat fold mirror or a fold mirror having an optical power in combination with all the other elements recited in the parent claim to dependent claims 7 and 8.

The prior art does not disclose or suggest wherein the beam splitter comprises: a spacer plate position between the first and second prisms in combination with all the other elements recited in parent claim to dependent claim 9.

Art Unit: 2851

The prior art does not disclose or suggest wherein the third optical device comprises a flat fold mirror or wherein the third optical device comprises a fold mirror having an optical power as recited in dependent claims 15 and 16.

The prior art does not disclose or suggest blocking backscattered light using a fifth optical device positioned between the beam splitter and the fourth optical device in combination with all the other steps recited in the parent claim to dependent claim 18.

The prior art does not disclose or suggest blocking backscattered light using a fifth optical device positioned in the beam splitter in combination with the steps recited in the parent claims to dependent claim 19.

Conclusion

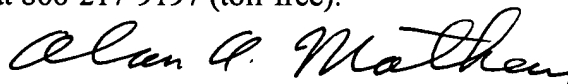
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents cited in the PTO-1449 are cited for the same reasons they were cited in Applicant's IDS filed September 10, 2004.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan A. Mathews
Primary Examiner
Art Unit 2851

AM